AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A medical valve for selectively permitting fluid to flow between a first medical device and a second medical device, the valve comprising:

a housing having an interface suitable for receiving a connector portion of the first medical device; and

a seal element made of a flexible material, the seal element having a downstream end in fluid communication with the interface, an upstream end suitable for receiving at least a portion of the second medical device, and a normally substantially closed passage in fluid communication with the downstream end and the upstream end, and a neck portion positioned in a region near the upstream end, the passage being relatively wide in the region of the upstream end and the passage being relatively narrow in the region of the downstream end, the passage adapted to have a relatively small interior volume when in an undisturbed state and a larger interior volume upon the introduction of the second medical device into the upstream end of the passage, the passage adapted to retract to define a restricted flow path and a relatively small interior volume upon the withdrawal of the second medical device from the seal element, at least a portion of the upstream end adapted to initially press ~~be substantially sealed~~ against the inserted portion of the second medical device as the second medical device is withdrawn, so that a fluid occupying the interior volume is forced toward the downstream end as the passage retracts~~walls collapse~~.

2. (Currently amended) The medical valve defined in Claim 1, wherein the seal element comprises:

a lead lumen formed in the downstream end of the seal element ~~body~~ and in fluid communication with the passage;

a neck formed in the upstream region of an outer surface of the seal element; and

a transverse flange in the upstream region of the seal element, the transverse flange having at least one opening in fluid communication with the passage.

3. (Currently amended) The medical valve of Claim 2, wherein the lead lumen is centered on an axis substantially parallel to or collinear with a longitudinal axis of the seal element.

4. (Currently amended) The medical valve of Claim 2, wherein the seal element comprises a substantially rectangular portion ~~slab~~ of flexible material coplanar with ~~and~~ the neck of the seal element~~is coplanar with the body~~.

5. (Original) The medical valve of Claim 1, wherein the passage in the undisturbed state tapers inwardly from the upstream end to a region of minimum width.

6. (Original) The medical valve of Claim 5, wherein the passage in the undisturbed state tapers outwardly from the region of minimum width toward the downstream end.

7. (Currently amended) The medical valve of Claim 2, wherein the seal element has first and second lateral portions and the housing further comprises:

a seal element holder attached to the interface, the seal element holder comprising a hollow cylindrical member that extends from the interface and has an axial opening opposite the interface, and first and second side openings;

a lead cannula attached to and in fluid communication with the interface and extending from the interface toward the axial opening,

wherein the seal element is disposed within the seal element holder such that the lead cannula extends at least partially into the lead lumen, the flange extends across the axial opening, and the first and second lateral portions of the seal element body extend into the first and second side openings.

8. (Original) The medical valve of Claim 7, wherein the lead cannula is centered on an axis substantially parallel to or collinear with a longitudinal axis of the housing.

9. (Currently amended) The medical valve of Claim 1, wherein a lead cannula attached to and in fluid communication with the interface extends from the interface into the downstream end of the seal element, an end of the lead cannula being disposed within the passage at a location in the upstream direction from the furthest downstream periphery of the interior volume of the seal element.

10. (Currently amended) The medical valve of Claim 7, wherein the seal element is adapted to move within the housing in the downstream direction upon insertion of the second

medical device and to move within the housing in the upstream direction upon withdrawal of the second medical device.

11. (Currently amended) The medical valve of Claim 10, wherein the lead lumen of the seal element expands as the seal element moves in the downstream direction and the lead cannula extends further into the interior of the passage of the seal element.

12. (New) The medical valve of Claim 1, wherein the housing further comprises a skirt with internal threads configured to positively engage the female end of a leur.

13. (New) The medical valve of Claim 12, wherein the housing is substantially cylindrical and has a substantially constant diameter along its length from the interface to an upstream end of the skirt.